

Processing of Ginger / Turmeric

1. After maturation the plant is harvested and after harvesting rhizomes can be done clean properly.
2. Then grading according to their size, shape etc.
3. After grading, it boil in water at 40-50⁰ C temperature during 40-60 minutes. We should not boil more time because excessive boil decrease the value and form black colour.
4. Then dry it in the sunlight during 10-12 days. After drying it is done polishing and in this way, processing is complete.

Diagrammatically shown-

Harvest → Clean → Grading → Boil in Water → Drying → Polishing.

Processing of Black Pepper

1. To obtain black pepper, fruiting spikes are harvested unripe but not far from ripeness, but steel green and shiny.
2. Fruit spikes are left in heaps, over night for brief fermentation.
3. In some places the berries are dipped into boiling water to provide a quick surface disinfections.
4. Under these circumstances, fermentation takes place and the formerly the green pepper fruits turn black.
5. The next morning, the mass of spiker are usually spread out on bamboo mates or concrete floors to dry in the sun for about 5-6 days.
6. They are racked regularly to help them dry out. Drying caused fruits to drop off the spikes.
7. The fleshy outer layer of the fruit shrinks giving the characteristic crinkled appearance of black pepper.
8. Dried pepper are then bagged for sale.

Processing of White pepper

White pepper is prepared from fully ripe decorticated and dried peppercorn. Harvesting is not undertaken until the berries become bright red. The following processes are followed:

Fermentation

- After harvesting, the ripe berries are detached from the spikes and are tightly packed into gunny bags. The bags are then allowed to soak in slow running water, usually a stream for between 1 or 2 weeks.
- During this operation a bacterial retting process occurs which loosens the pericarp from the core of the fruit.

Cleaning

- After removal of the bags from the water, the berries are placed in a tank of water and are trampled to

remove any remaining adhering pericarp.

- Finally the smooth bulb coloured cores are thoroughly washed in streaming water.

Drying

- Sun drying carried out on bamboo mats in a similar manner to black pepper with regular racking.
- Sun drying can take several days to reduce the moisture content to 10-15% and to achieve a cream or white color.
- A simple test for the completion of drying involves applying pressure to the peppercorn, if insufficiently dry, it will split into 2, when thoroughly dry it will crumble into small pieces.
- Approximately 25 kg of dried pepper is obtained from 100 kg of ripe fresh fruit.

In brief, Diagrammatically it shown below-

Harvest → Fermentation (2-3 days) → Dipped in running water (7-10 days) → Cleaning → Drying → Use

Storage of Onion

1. After harvesting, dry or cure the onions in a warm, dry, well-ventilated location, such as a shed or garage. Spread out the onions in a single layer on a clean, dry surface.
2. Cure the onions for two to three weeks until the onion tops and necks are thoroughly dry and the outer bulb scales begin to rustle.
3. After the onions are properly cured, cut off the tops about 1 inch above the bulbs. As the onions are topped, discard any that show signs of decay.
4. Use the thick-necked bulbs as soon as possible as they don't store well. An alternate preparation method is to leave the onion tops untrimmed and braid the dry foliage together.
5. Place the cured onions in a mesh bag, old nylon stocking, wire basket, or crate. It's important that the storage container allow air to circulate through the onions.
6. Store the onions in a cool, moderately dry location. Storage temperatures should be 32 to 40 degrees F. The relative humidity should be 65 to 70 percent.
7. Possible storage locations include a basement, cellar, or garage. Hang the braided onions from a rafter or ceiling.

Old Mother Rhizome Lifting of Ginger

It is done by uprooting of mother rhizomes 75-90 days. After planting, when plant is fully established, mother rhizome is uprooted carefully from the opposite direction of the established plant. After uprooting, the soils around the plants are given firmly by hand. The process can not hamper the mother plant. We can easily collect them and can sale it after drying, which show the same quality. Sometimes, it bears high medicinal value than new rhizomes. This process is known as "pillaitola" or appendix uprooting and it is

practical widely in Nilfamary district.

Processing of Cinnamon

After collecting the stem from cinnamon plant processing is done by following way-

Cutting and Peeling:

- The cut stems or sticks of cinnamon are given longitudinally slits from one end to other, which is called splitting.
- The 2 halves of entire bark are removed with the help of a knife is known as peeling.
- If the bark does not peel, easily then the sticks are rubbed in between hard pieces of wood so as to enable easy detachment of the bark.

Fermentation and Scraping

- The barks are packed together and placed on above and piled up in small enclosures.
- Then they are covered with dry leaves or mat to enhance slight fermentation for the next day.
- After slight fermentation multicellular hair, epidermis and some portion of hypodermis will be decomposed.
- Removing the decomposed area of bark through scraping.

Drying

- Scraped barks are dried in the sunlight for 4 days.
- During drying the bark contracts and assumes the shape of pipe, which is commercially known as quill.
- Broken part of quill is known as quillings. The smaller quills are inserted into larger ones to form compound quills.
- The very thin inner portion of cinnamon bark is known as feathering.
- More than 2.5 mm thick quill is known as chip.